Service Manual

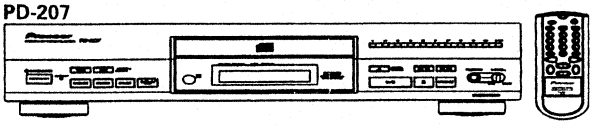
Pioneer

ORDER NUMBER: XRV1002

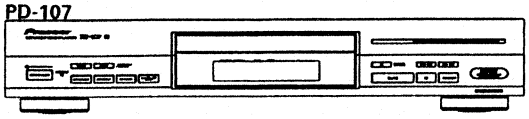
COMPACT DISC PLAYER

PD-207
PD-107

PD-207



PD-107



THIS MANUAL IS APPLICABLE TO THE FOLLOWING MODELS AND TYPES.

Type	Model		Power Requirement
	PD-107	PD-207	
WYXK	O	O	220-240 VAC
WVXK	O	O	220-240 VAC

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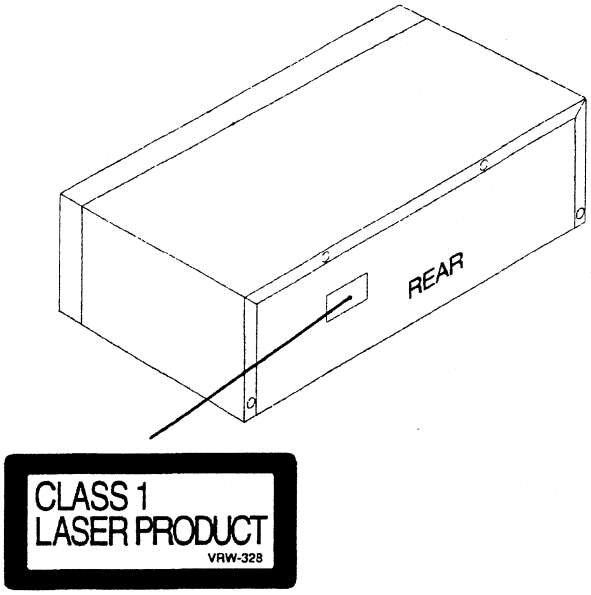
C PIONEER ELECTRONICS TECHNOLOGY (UK) LTD

NOVEMBER 1998

1. SAFETY INFORMATION - LABEL CHECK

OUTSIDE THE UNIT



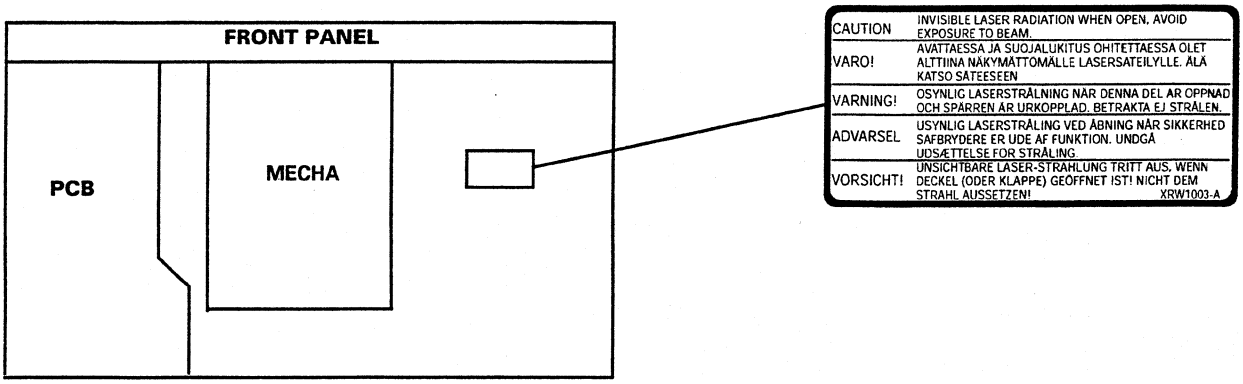
Additional Laser Caution

1. Laser Interlock Mechanism
   The position of the switch (S651) for detecting loading state is detected by the system microprocessor, and the design prevents laser diode oscillation when the switch (S651) is not on $\overline{\text{CLMP}}$ terminal side ($\overline{\text{CLMP}}$ signal is OFF or high level).
   Thus, the interlock will no longer function if the switch (S651) is deliberatery set to $\overline{\text{CLMP}}$ terminal side. (low level)
   The interlock also does not function in the test mode ✱. Laser diode oscillation will continue, if pin 33 of CXA1782CQ (IC151) on the MOTHER BOARD ASSY is connected to GND, or pin 28 of IC351 ($\overline{\text{LDON}}$) is connected to low level (ON), or else the terminals of Q151 are shorted to each other (fault condition).

2. When the cover is opened, close viewing of the objective lens with the naked eye will cause exposure to a Class 1 laser beam.

✱ : Refer to page 20

INSIDE THE UNIT

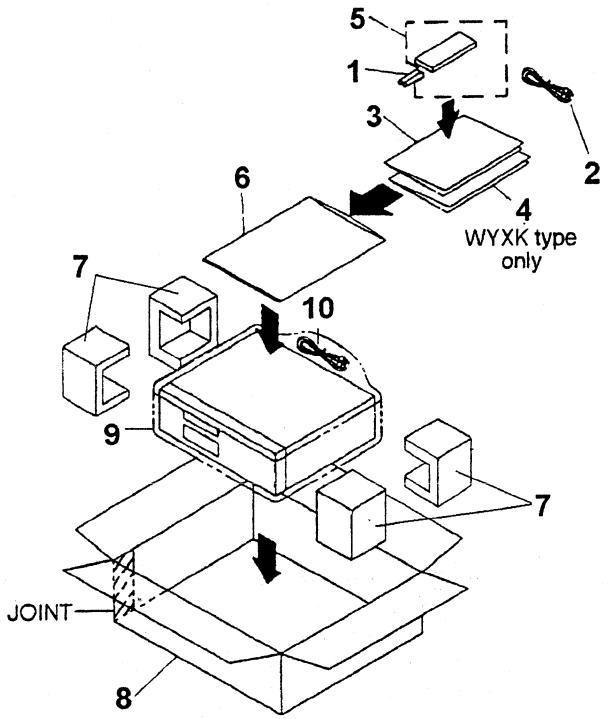

FRONT PANEL
PCB
MECHA
CAUTION INVISIBLE LASER RADIATION WHEN OPEN. AVOID EXPOSURE TO BEAM.
VARO! AVATTAESSA JA SUOJALUKITUS OHITETTAESSA OLET ALTTIINA NÄKYMÄTTOMÄLLE LASERSATEILYLLE. ÄLÄ KATSO SÄTEESEEN
VARNING! OSYNLIG LASERSTRÅLNING NÄR DENNA DEL ÄR ÖPPNAD OCH SPÄRREN ÄR URKOPPLAD. BETRAKTA EJ STRÅLEN.
ADVARSEL USYNLIG LASERSTRÅLING VED ÅBNING NÅR SIKKERHED SAFBRYDERE ER UDE AF FUNKTION. UNDGÅ UDSÆTTELSE FOR STRÅLING.
VORSICHT! UNSICHTBARE LASER-STRAHLUNG TRITT AUS, WENN DECKEL (ODER KLAPPE) GEÖFFNET IST! NICHT DEM STRAHL AUSSETZEN!
XRW1003-A

2. EXPLODED VIEWS AND PARTS LIST

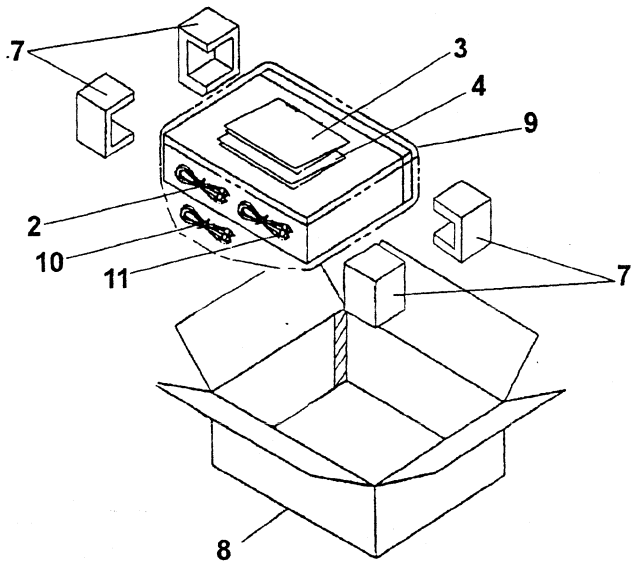
NOTES: - Parts marked by 'NSP' are generally unavailable because they are not in our master spare parts list.
- The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
- Screws adjacent to ▼mark on product are used for disassembly.

2.1 PACKING

PD-207/WYXK and PD-207/WVXK



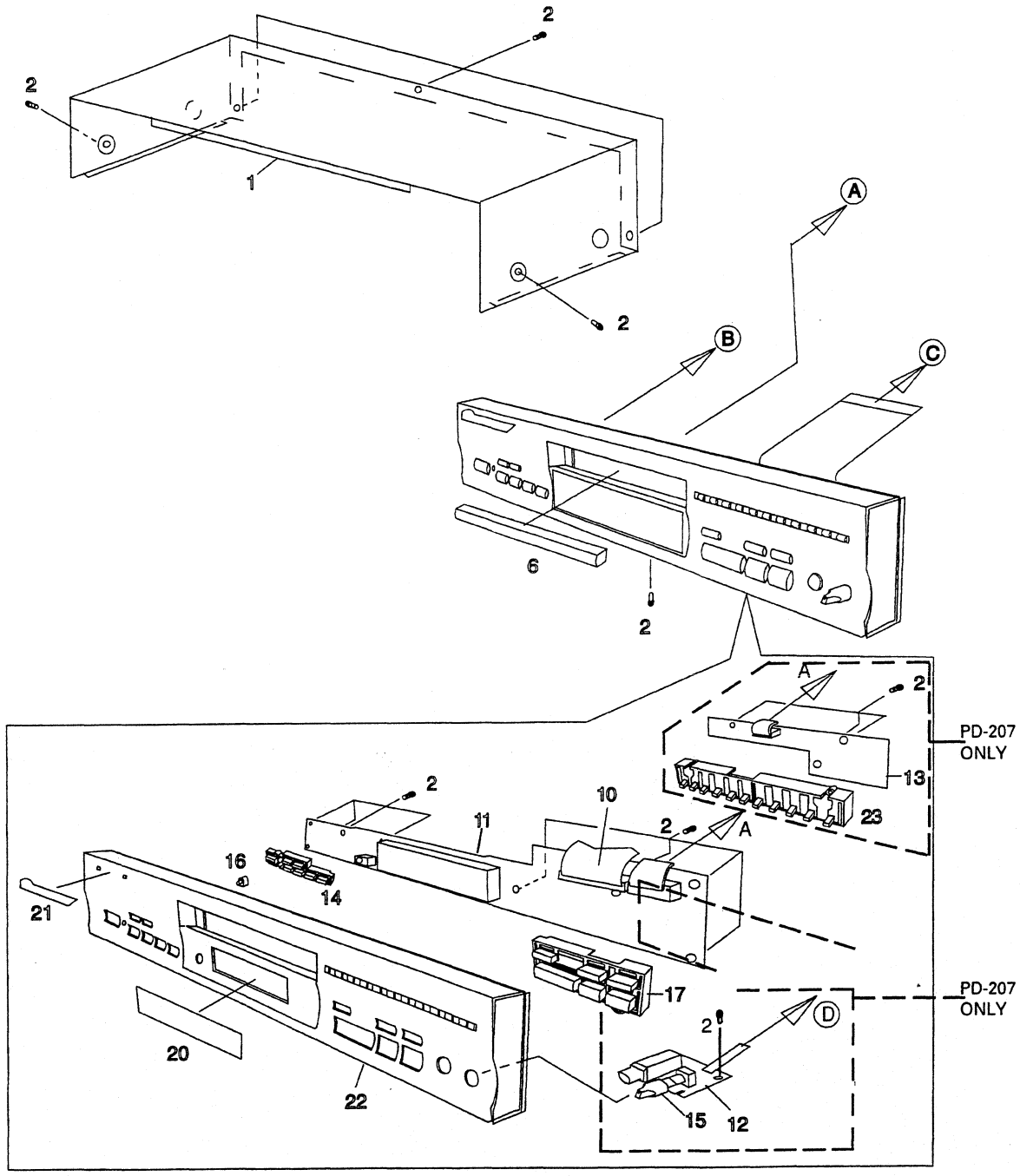
PD-107/WYXK and PD-107/WVXK

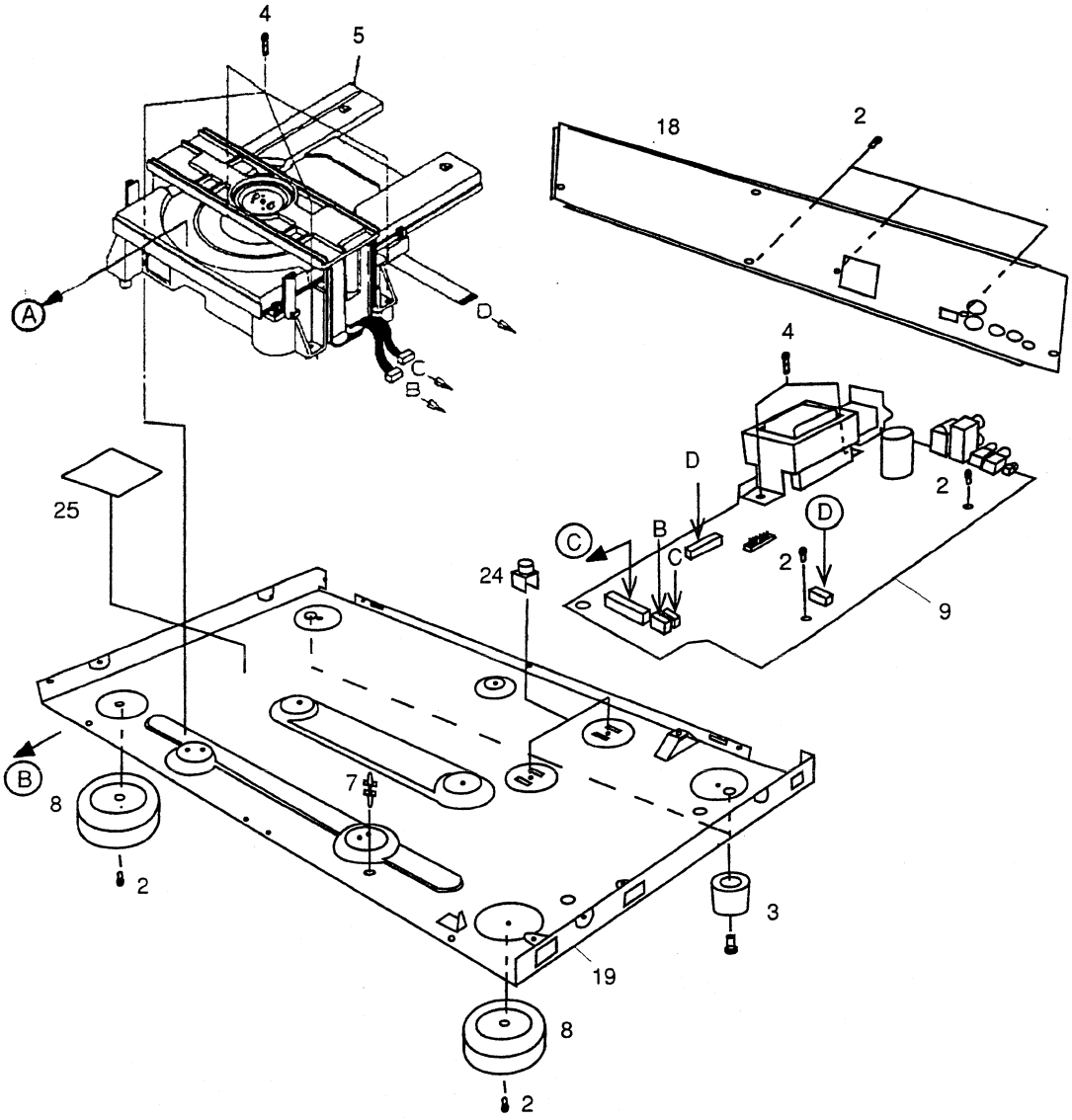


NB. For WVXY Models, the pins of the UK plug are inserted into the holes in the rear panel before packing.

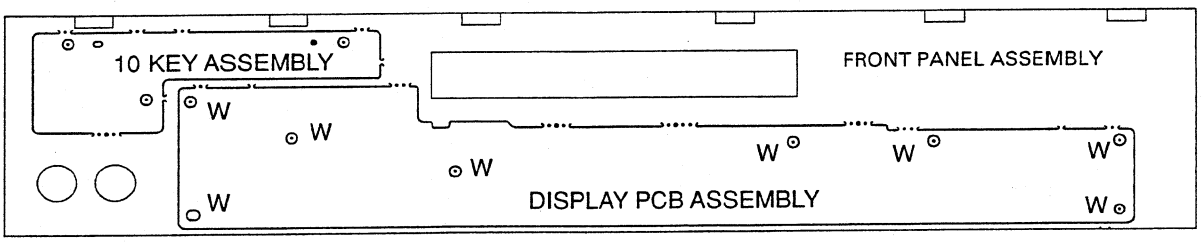
			PD-107/WYXK	PD-107/WVXK	PD-207/WYXK	PD-207/WVXK
1	BATTERY (AAA)	PEM1004	NOT USED	NOT USED		
2	OUTPUT CABLE	PDE1249				
3	INSTRUCTION MANUAL (ENGLISH)	XRB1002				
4	INSTRUCTION MANUAL (Fre,Ger,Ita,Dut,Swe,Spa,Por)	XRD1001		NOT USED		NOT USED
5	REMOTE CONTROL	XWW1001	NOT USED	NOT USED		
6	PLASTIC BAG	AHG7011	NOT USED	NOT USED		
7	STYROL PROTECTOR	XHA1004				
8	PACKING CASE	XHD1012	NOT USED	NOT USED		
	PACKING CASE	XHD1011			NOT USED	NOT USED
9	PACKING SHEET	PHL1072				
⚠10	POWER CORD	ADG7010		NOT USED		NOT USED
⚠	POWER CORD	ADG7009	NOT USED		NOT USED	
11	CONTROL CABLE	PDE1095			NOT USED	NOT USED

2.2 MECHANICAL - EXPLODED VIEWS





REMOVING AND REPLACING THE DISPLAY PCB ASSEMBLY.

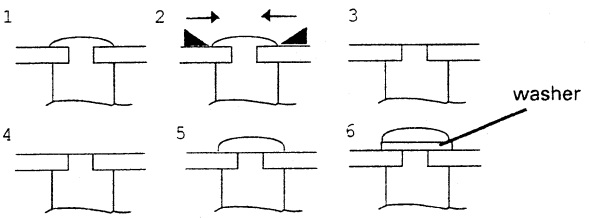


REMOVING

1 The PCB is held in place by 8 plastic welds,marked W above.
2 Using flat edge cutters, carefully cut the ends off the welds. BE CAREFUL NOT TO DAMAGE THE COPPER PATTERN.
3 Remove the PCB.

REFITTING

4 Refit the PCB to the posts.
5 Fix the PCB in position using BBZ30P080FZK screws.
6 If an alternative screw is used, it is recommended that a nylon or fibre washer be fitted before the screw.

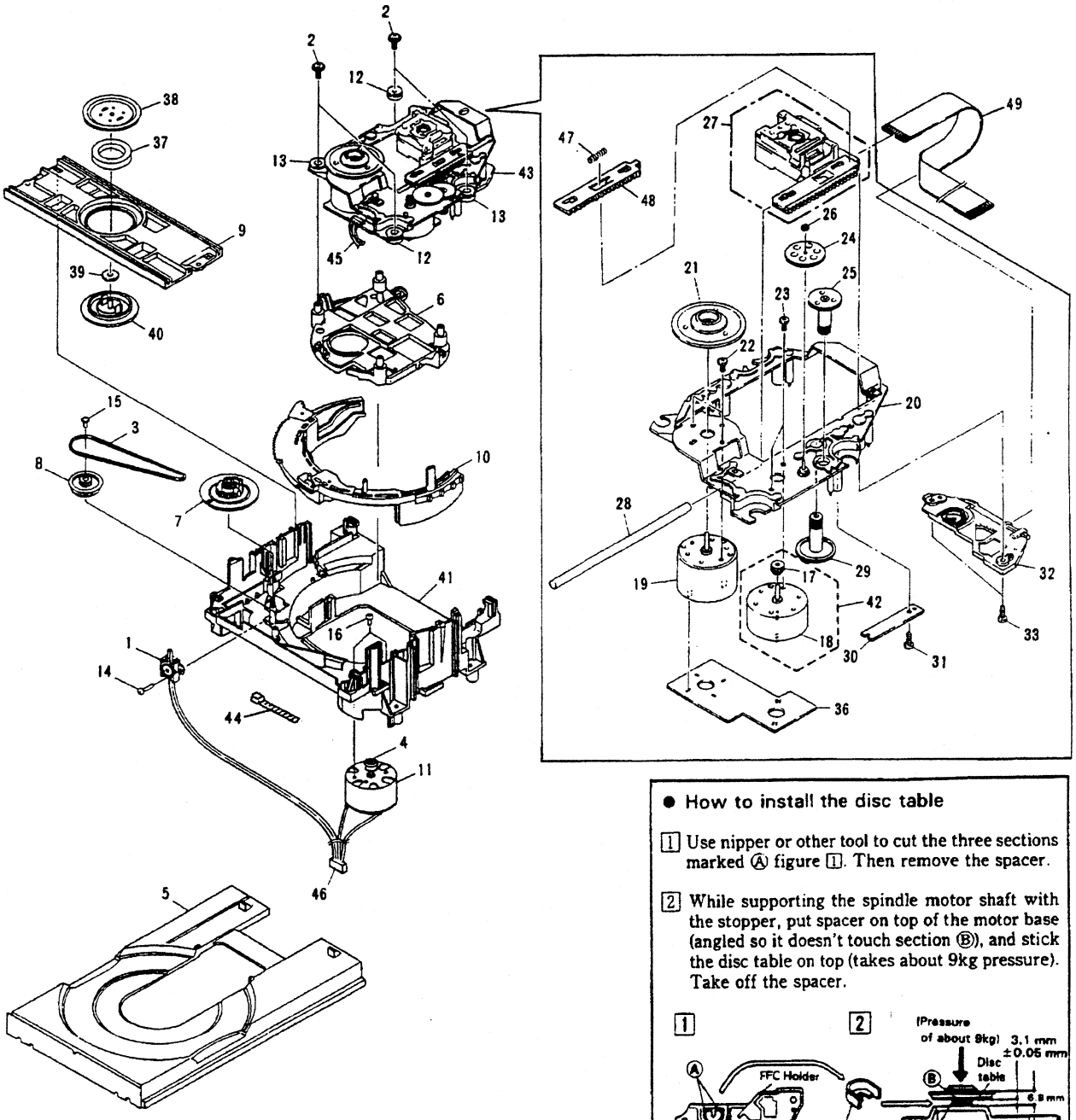


2.2 MECHANICAL - PARTS LIST

			PD-207		PD-107	
			WYXK	WVXK	WYXK	WVXK
	1	BONNET	XNE1002			
	2	SCREW	BBZ30P080FZK			
	3	INSULATOR	PNW2766			
	4	SCREW	BBZ30P180FMC			
NSP	5	SINGLE MECHA ASSY	XXA1002			
	6	TRAY CAP	XNW1002		XNW1005	
	7	PCB SUPPORTS	AEC7006			
	8	FOOT (RUBBER)	REC1263			
NSP	⚠ 9	MAIN BOARD ASSY	XWM1006		XWM1005	
	10	FFC (23P)	XDD1001			
NSP	11	DISPLAY PCB ASSY	XWZ1002		XWZ1001	
NSP	12	HEADPHONE ASSY	XWZ1003		NOT USED	
	13	10 KEY ASSY	XWZ1004		NOT USED	
	14	POWER BUTTON	XAC1001			
	15	KNOB	PAC1707		NOT USED	
	16	LED LENS	PNW2019			
	17	PLAY BUTTON	XAC1002			
	18	REAR PANEL	XNC1002		XNC1001	
NSP	19	CHASSIS	XNA1001			
	20	DISPLAY WINDOW	XAM1004		XAM1005	
	21	NAME PLATE	PAM1776			
	22	FRONT PANEL	XNW1003		XNW1004	
	23	10KEY	XAC1003		NOT USED	
	24	PCB MOLD	AMR2533			
NSP	25	CAUTION LABEL (COMB)	XRW1003			

PD-207/PD-107

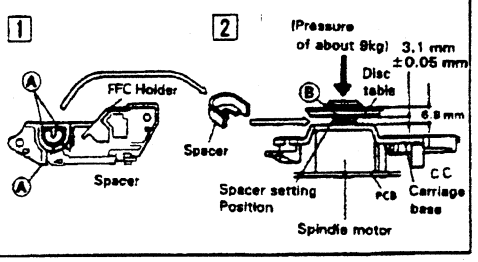
2.3 SINGLE MECHANISM ASSY - EXPLODED VIEW



● How to install the disc table

[1] Use nipper or other tool to cut the three sections marked Ⓐ figure [1]. Then remove the spacer.

[2] While supporting the spindle motor shaft with the stopper, put spacer on top of the motor base (angled so it doesn't touch section Ⓑ), and stick the disc table on top (takes about 9kg pressure). Take off the spacer.



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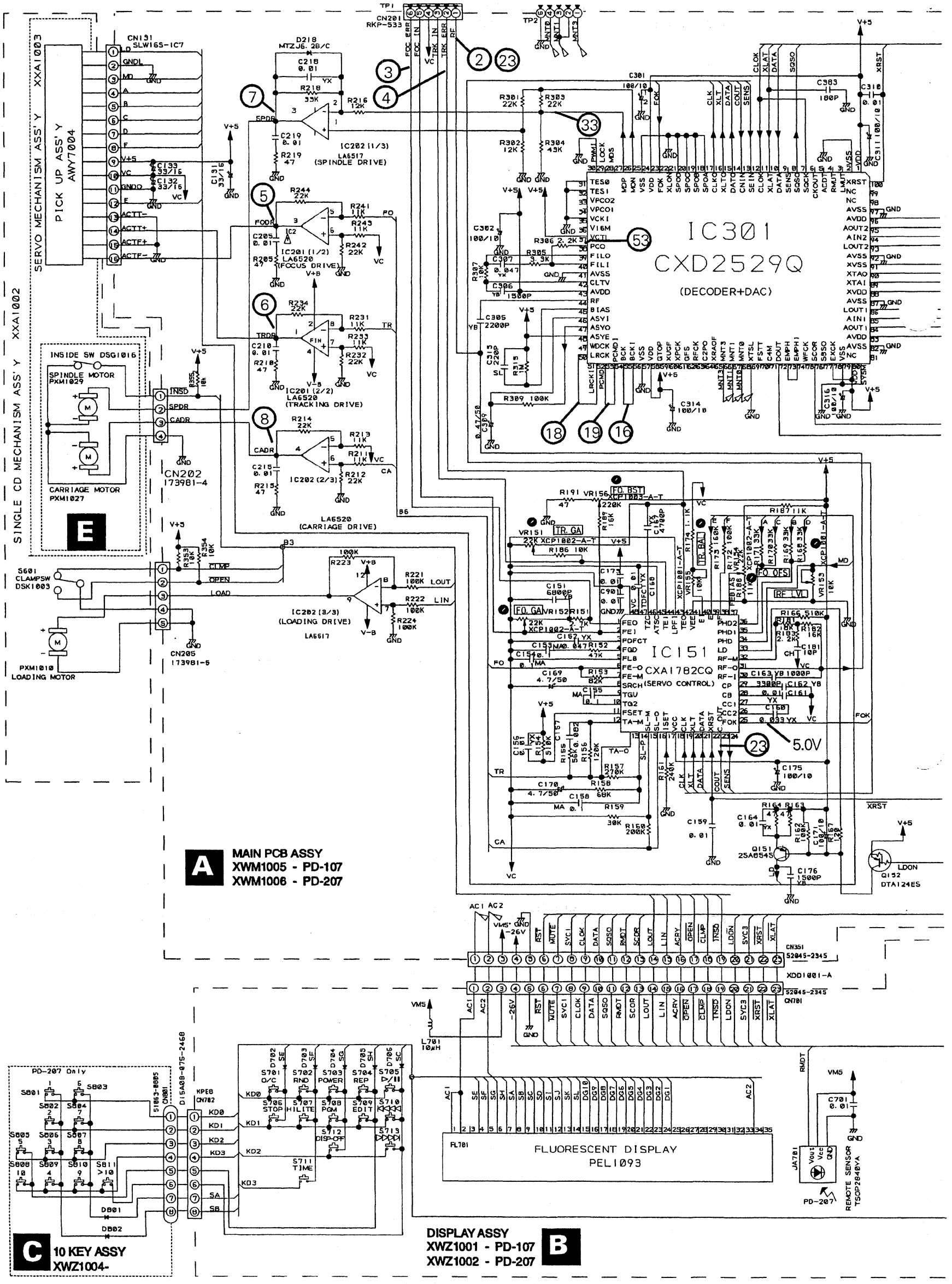
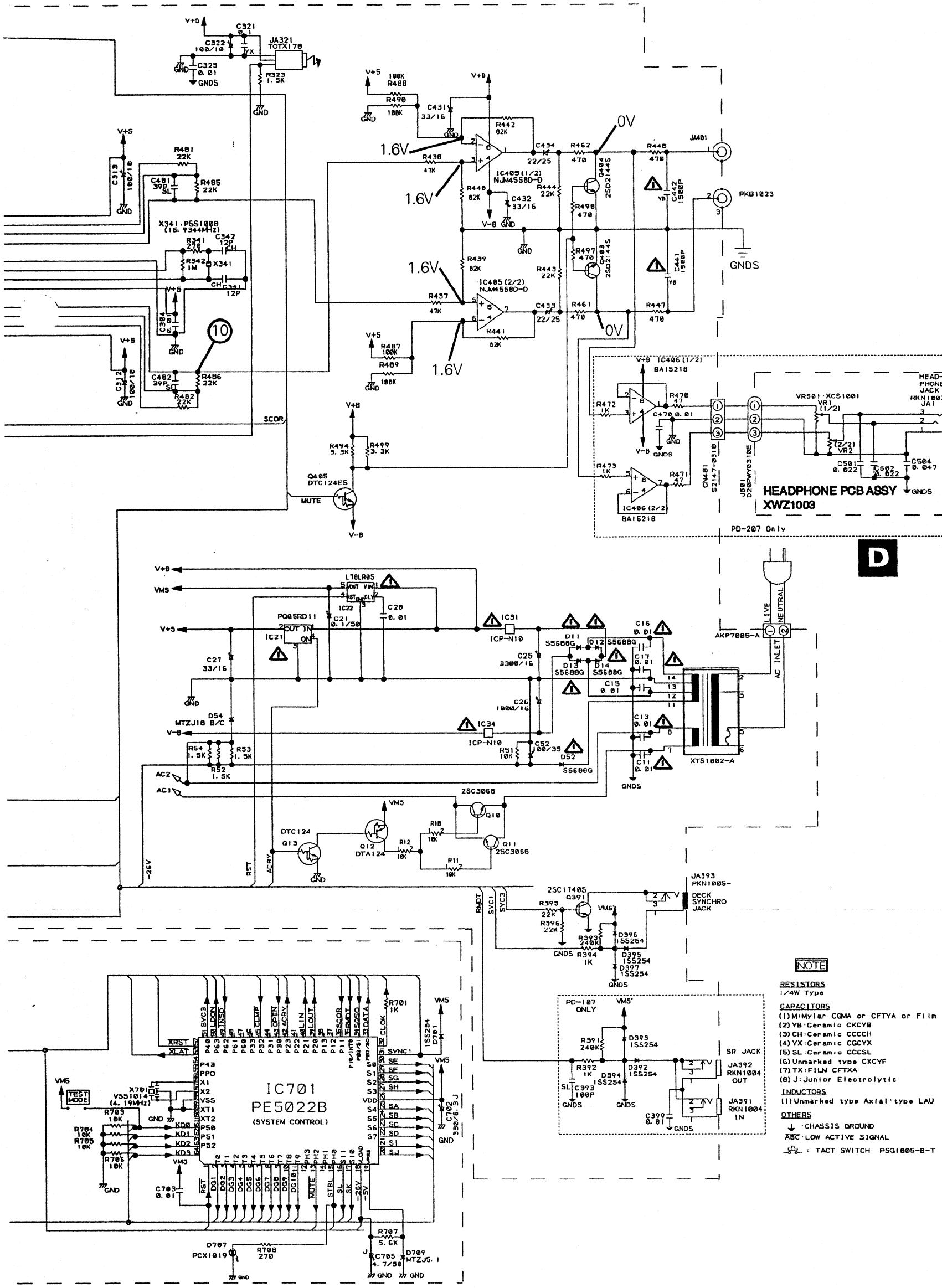
2.3 SINGLE MECHANISM ASSY - PART LIST

Mark	No.	Description	Part No.
	1	Lever Switch	DSK1003
	2	Screw	PBA1048
	3	Rubber Belt	PEB1193
	4	Motor Pulley	PNW1634
	5	Tray Black V	PNW2455
	6	Float Base	PNW2032
	7	Drive Gear 2	PNW2369
	8	Gear Pulley	PNW2034
	9	Clamper Base	PNW2375
	10	Clamp Cam	PNW2364
	11	DC Motor/0.75W	PXM1010
	12	Float Rubber B	REB1287
	13	Float Rubber G	REB1288
	14	Screw	BPZ26P080FMC
	15	Screw	Z39-019
	16	Screw	PMZ26P040FMC
	17	Pionion Gear	PNW2055
NSP	18	DC Motor (CARRIAGE)	PXM1027
	19	D.C.Motor Assy (SPINDLE)	PEA1235
	20	Carriage Base	PNW2699
	21	Disc Holder	PNW1608
	22	Screw	JFZ20P030FNI
	23	Screw	JFZ17P025FZK
	24	Gear3	PNW2054
	25	Gear2	PNW2053
	26	Washer	WT12D032D025
	27	Pick UP Assy	AWY7004
	28	Guide Bar	PLA1094
	29	Gear1	PNW2052
	30	Gear Stopper	PNB1303
	31	Screw	BPZ20P060FMC
	32	FFC Holder	PNW2734
	33	Screw	BPZ26P100FMC
	34	.....	.....
	35	.....	.....
NSP	36	MECHANISM BOARD ASSY	PWX1192
	37	Clamp Magnet	PMF1014
	38	Yoke	PNB1216
NSP	39	H Rubber	PEB1249
	40	Clamper S	PNW1609
	41	Loading Base	PNW2376
	42	DC Motor Assy (CARRIAGE)	PEA1246
NSP	43	SERVO MECHANISM ASSY	PXA1596
	44	Binder	Z09-056
	45	Connector Assy (4p)	RDE1043
	46	Connector Assy (5p)	PDE1239
	47	PU Rack Spring	ABH7077
	48	Rack Holder	PNW2056
	49	16P FFC/30V	PDD1183

3. SCHEMATIC DIAGRAM



NOTE: WHEN ORDERING SERVICE PARTS, BE SURE TO REFER TO "EXPLODED VIEWS AND PARTS LIST" OR "PCB PARTS LIST"

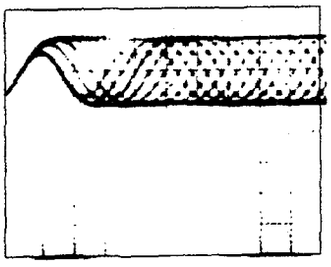


Waveforms

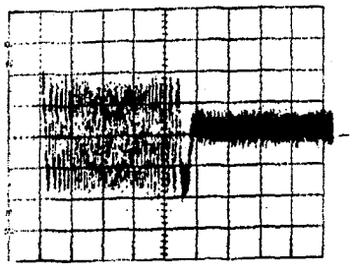
Note : The encircled numbers denote measuring points in the schematic diagram.

*1 50T-JUMP : After switching to the pause mode, Press the manual search key.
*2 FOCUS-IN : Press the key without loading a disc.

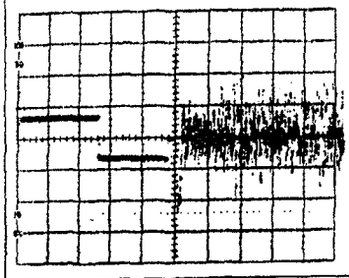
(2) TP1-Pin 1 : PLAY MODE (RF)
500mV/div 500nsec/div



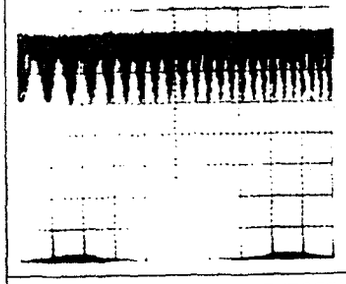
(4') TP1-Pin 2 : 50T - JUMP (*1) MODE (TRER)
200mV/div 1msec/div



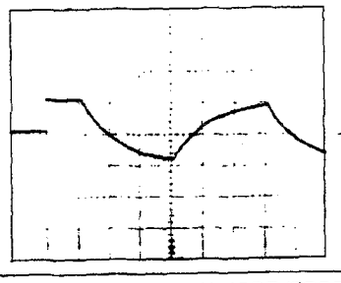
(6') IC202-Pin 3 : 50T - JUMP (*1) MODE (TRDR)
500mV/div 1msec/div



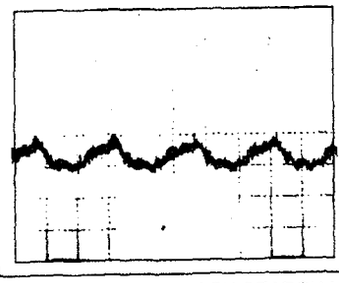
(2) TP1-Pin 1 : TRACK SEARCH MODE (RF)
500mV/div 200µsec/div



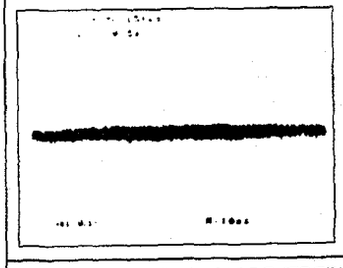
(5) IC202-Pin 4 : FOCUS-IN (*2) MODE (FODR)
1V/div 200msec/div



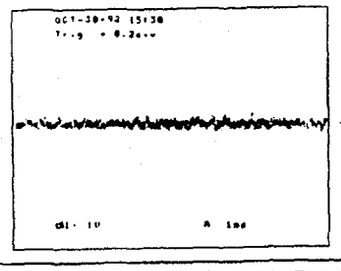
(7) IC201-Pin 9 : PLAY MODE (SPDR)
1V/div 50msec/div



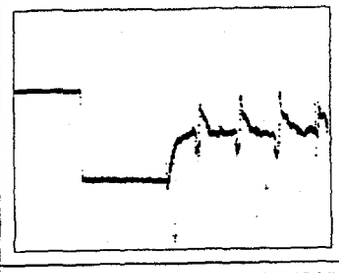
(3) TP1-Pin 6 : PLAY MODE (FOER)
100mV/div 10msec/div



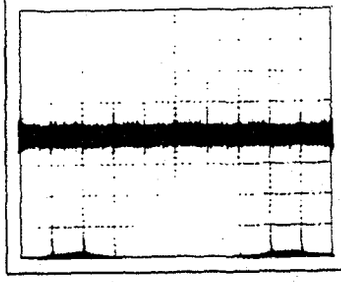
(5) IC202-Pin 4 : PLAY MODE (FODR)
1V/div 1msec/div



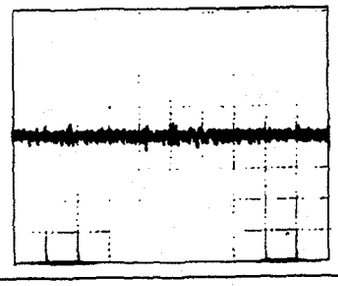
(7) IC201-Pin 9 : TRACK SEARCH MODE (SPDR)
2V/div 50msec/div



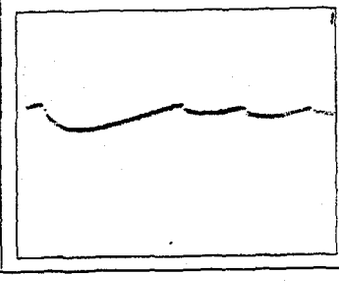
(4) TP1-Pin 2 : PLAY MODE (TRER)
200mV/div 1msec/div



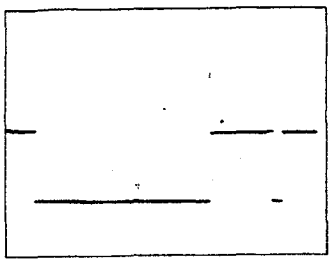
(6) IC202-Pin 3 : PLAY MODE (TRDR)
500mV/div 1msec/div



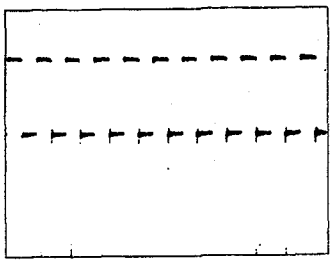
(8) IC202-Pin 9 : PLAY MODE (CADR)
0.2V/div 2sec/div



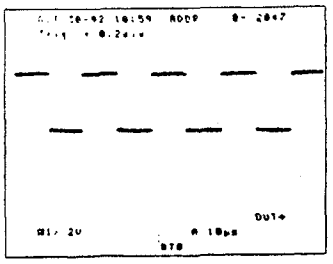
⑧ IC202-Pin 9 : TRACK SEARCH MODE (CADR)
2V/div 200msec/div



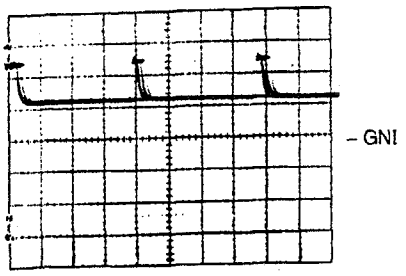
⑯ IC301-Pin 54 : PLAY MODE (1kHz) (BCK)
2V/div 500nsec/div



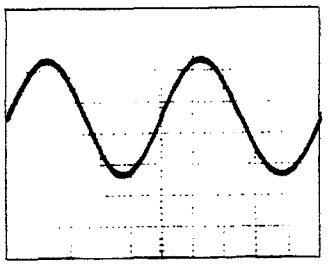
⑱ IC301-Pin 50 : PLAY MODE (1kHz) (LRCK)
2V/div 10µsec/div



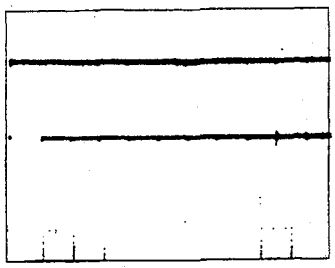
㉝ IC301-Pin 27 : PLAY MODE (MDP)
2V/div 2µsec/div



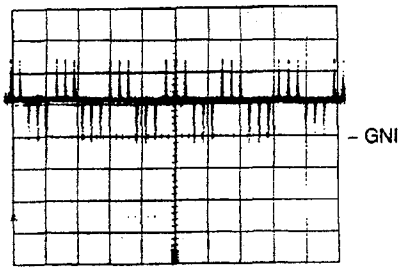
⑩ IC301-Pin 86 : PLAY MODE (1kHz) (LOUT 1)
1V/div 200µsec/div



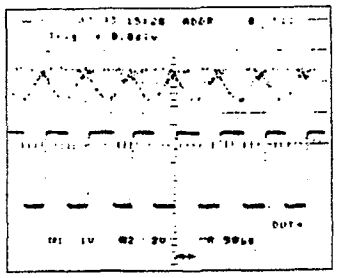
⑲ IC301-Pin 52 : PLAY MODE (1kHz) (PCMD)
2V/div 500nsec/div



㊸ IC301-Pin 38 : PLAY MODE (PCO)
2V/div 10µsec/div



㉓ : TRACK SEARCH MODE
Upper : TP1-Pin 1 (RF) 1V/div
Lower : IC151-Pin 23 (C.OUT)
2V/div 50µsec/div



4. PCB CONNECTION DIAGRAM

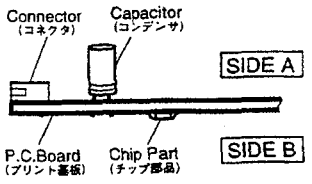
NOTE FOR PCB DIAGRAMS

1. Part numbers in PCB diagrams match those in the schematic diagrams.
2. A comparison between the main parts of PCB and schematic diagrams is shown below.

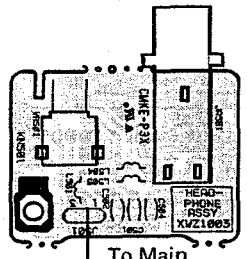
Symbol in PCB Diagrams	Symbol in Schematic Diagrams	Part Name
B C E	B C E B C E	Transistor
B C E	B C E B C E	Transistor with resistor
D G S	D G S D G S	Field effect transistor
		Resistor array
		3-terminal regulator

3. The parts mounted on this PCB include all necessary parts for several destination.
   For further information for respecitve destinations, be sure to check with the schematic diagram.

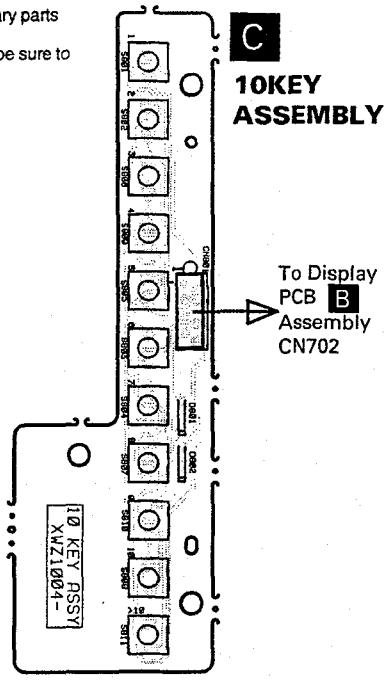
4. Viewpoint of PCB diagrams



D HEADPHONE ASSEMBLY



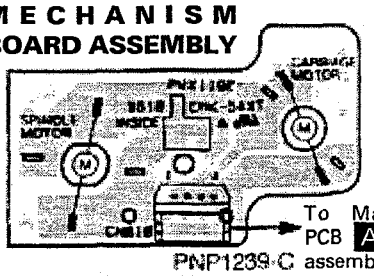
To Main Board A Assembly CN401



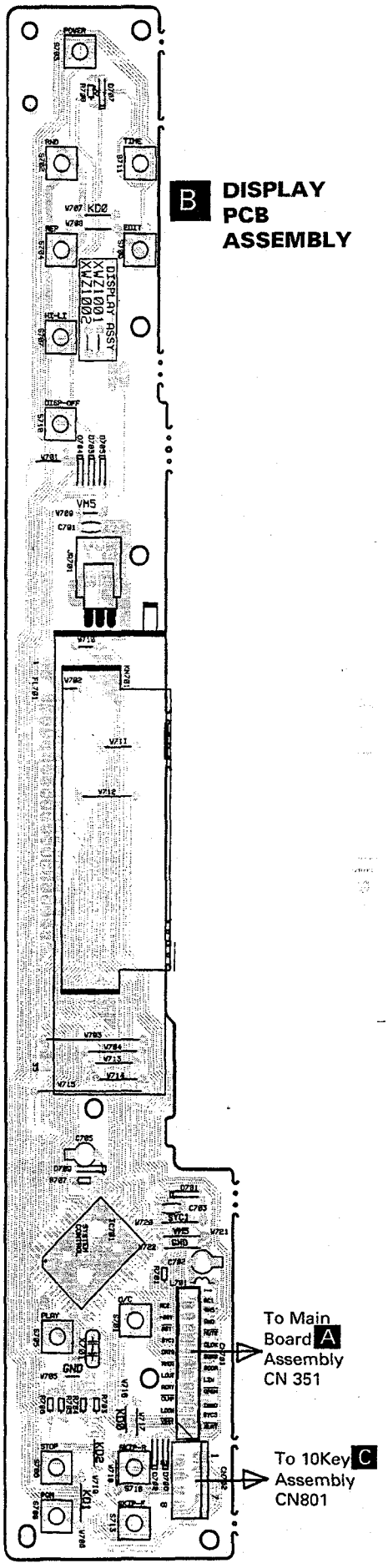
C 10KEY ASSEMBLY

To Display PCB B Assembly CN702

E MECHANISM BOARD ASSEMBLY



To Main PCB A assembly CN202

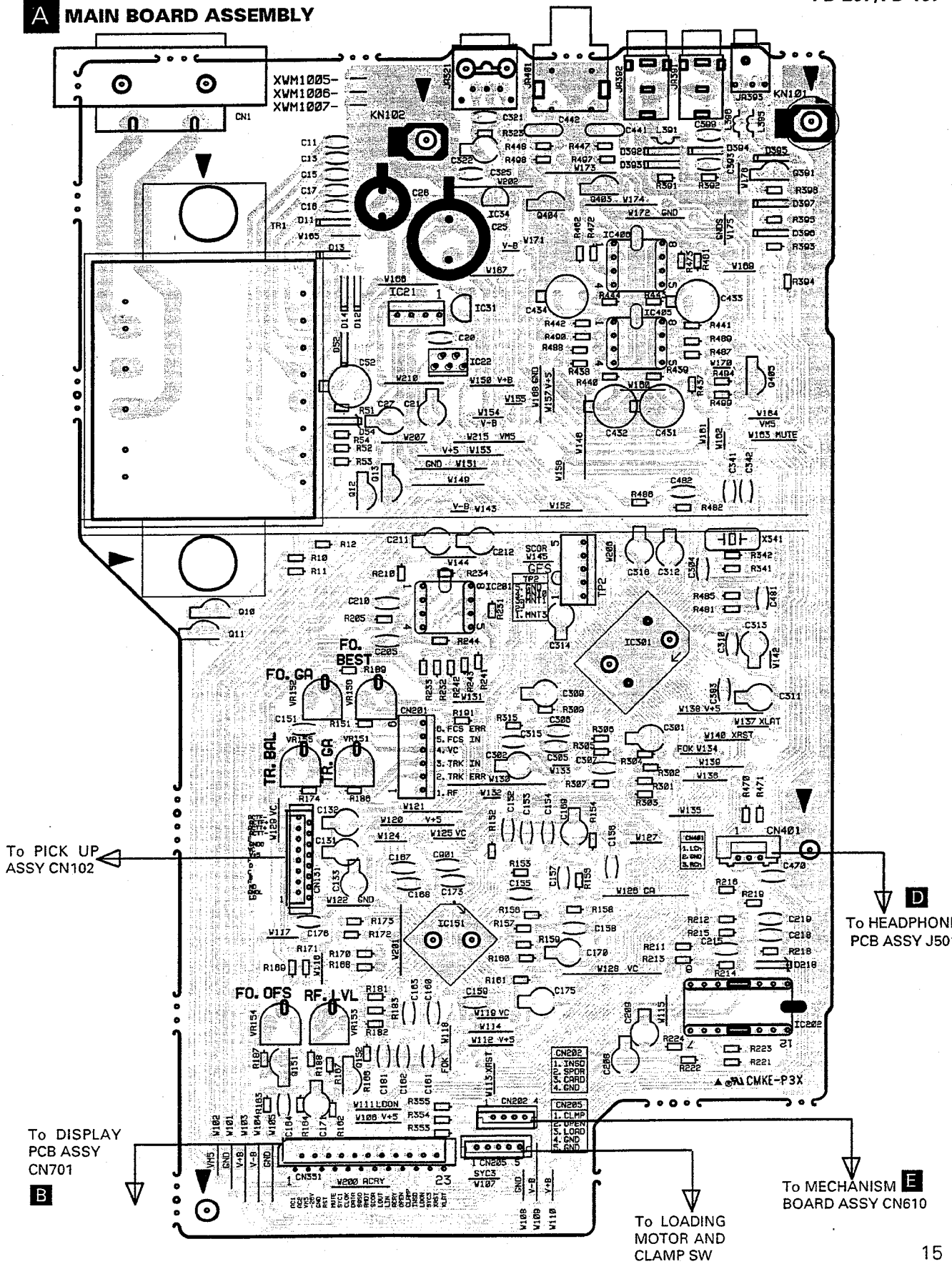


B DISPLAY PCB ASSEMBLY

To Main Board A Assembly CN 351

To 10Key C Assembly CN801

A MAIN BOARD ASSEMBLY



5. PCB PARTS LIST

NOTES:
- *Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *When ordering resistors, first convert resistance values into code form as shown in the following examples.*

Ex.1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J = 5%, and K = 10%).

560Ω	→	*56 × 10¹* →	*561*	*RD1/4PU 5 6 1 J*
47kΩ	→	*47 × 10³* →	*473*	*RD1/4PU 4 7 3 J*
0.5Ω	→	*R50*		*RN2H R 5 0 K*
1Ω	→	*1R0*		*RS1P 1 R 0 K*

Ex.2 When there are 3 effective digits (such as in high precision metal film resistors).

5.62kΩ	→	*562 × 10¹* →	*5621*	*RN1/4PC 5 6 2 1 F*

LIST OF WHOLE PCB ASSEMBLIES

	Mark	Description	PD-207 WYXK	PD-207 WVXK	PD-107 WYXK	PD-107 WVXK
⚠	NSP	MAIN BOARD ASSEMBLY	XWM1006		XWM1005	
⚠	NSP	SUB PCB ASSEMBLY	XWX1003		XWX1002	
	NSP	┣DISPLAY PCB ASSEMBLY	XWZ1002		XWZ1001	
	NSP	┣10KEY ASSEMBLY	XWZ1004		NOT USED	
	NSP	┗HEADPHONE ASSEMBLY	XWZ1003		NOT USED	
	NSP	SINGLE MECHA ASSEMBLY	XXA1002			
	NSP	┗SERVO MECHA ASSY	XXA1003			
	NSP	┗MECHANISM PCB ASSY	PXA1192			

5.1 CONTRAST OF PCB ASSEMBLIES

DISPLAY PCB ASSEMBLY

XWZ1001 has the same construction as XWZ1002 except for the following.

Mark	Part Number	Description	Location	
CAPACITORS				
	CKCYF103Z50-T	CERAMIC CAPACITOR	C 701	NOT USED
OTHERS				
	TSOP2840YA	REMOTE SENSOR	JA 701	NOT USED
	KPE8	52004-0810 CONNECTOR	CN702	NOT USED

MAIN BOARD ASSEMBLY

XWM1005 has the same construction as XWM1006 except for the following.

Mark	Part Number	Description	Location	
SEMICONDUCTORS				
	1SS254-T	DIODE	D 392 393 394	USED
	BA15218	OP-AMP IC	IC 406	NOT USED
CAPACITORS				
	CKCYF103Z50-T	CERAMIC CAPACITOR	C 470	NOT USED
	CCCSL101J50-T	CERAMIC CAPACITOR	C 393	USED
	CKCYF103Z50-T	CERAMIC CAPACITOR	C 399	USED
RESISTORS				
	RD1/4PU470J-T	CARBON FILM RESISTOR	R 470 471	NOT USED
	RD1/4PU102J-T	CARBON FILM RESISTOR	R 472 473	NOT USED
	RD1/4PU244J-T	CARBON FILM RESISTOR	R 391	USED
	RD1/4PU102J-T	CARBON FILM RESISTOR	R 392	USED
OTHERS				
	RKN1004-A	JACK	J 391 392	USED
	52147-0310	CONNECTOR (3P)	CN401	NOT USED

5.2 PCB PARTS LISTS

HEADPHONE ASSY- XWZ1003 D

Mark	Part Number	Description	PCB Location
CAPACITORS			
	CKCYF223Z50-T	CERAMIC CAPACITOR	C 501 502
	CKCYF473Z50-T	CERAMIC CAPACITOR	C 504
OTHERS			
	D20PWY0310E	FLAT CABLE (3P)	J 501
	RKN1002-A	HEADPHONE JACK	JA 1
	XCS1001-A	VARIABLE RESISTOR	VR 501

10KEY ASSY - XWZ1004 C

Mark	Part Number	Description	PCB Location
SEMICONDUCTORS			
	1SS254-T	DIODE	D 801 802
SWITCHES AND RELAYS			
	PSG1005-B-T	TACTILE SW.(SKHVBB)	S 801 802 803 804 805 806 807 808 809 810 811
OTHERS			
	51063-0805	AKT1022-A HOLDER	CN801
	D15A08-075-2468	FLAT CABLE (8P)	J 801

DISPLAY PCB ASSY - XWZ1002 B

Mark	Part Number	Description	PCB Location
SEMICONDUCTORS			
	PE5022B	UPD75212AGF-605-3BE	IC 701
	SLH34VCF04-T	LED (RED)	D 707
	MTZJ5.1B/C-T	ZENER DIODE	D 709
	1SS254-T	DIODE	D 701 702 703 704 705 706
CAPACITORS			
	CEJA331M6R3-T	ELECT. CAPACITOR	C 702
	CEJA4R7M50-T	ELECTROLYTIC CAP.	C 705
	CKCYF103Z50-T	CERAMIC CAPACITOR	C 701 703
COILS AND FILTERS			
	LAU100J-T	AXIAL INDUCTOR	L 701
RESISTORS			
	RD1/4PU102J-T	CARBON FILM RESISTOR	R 701
	RD1/4PU103J-T	CARBON FILM RESISTOR	R 703 704 705 706
	RD1/4PU562J-T	CARBON FILM RESISTOR	R 707
	RD1/4PU271J-T	CARBON FILM RESISTOR	R 708
SWITCHES AND RELAYS			
	PSG1005-B-T	TACTILE SW.(SKHVBB)	S 701 702 703 704 705 706 707 708 709 710 711 712 713
OTHERS			
	VSS1014-A-T	CERAMIC RESONATOR	X 701
	KPE8	52004-0810 CONNECTOR	CN702
	52045-2345	CONNECTOR (23P)	CN701
	PEL1093-A	FL TUBE (10SM02)	FL 701
	TSOP2840YA	REMOTE SENSOR	JA 701

MAIN PCB ASSEMBLY - XWM1006- B

Mark	Part Number	Description	PCB Location
SEMICONDUCTORS			
	1SS254-T	DIODE	D 395 396 397
	BA15218	OP-AMP IC	IC 406
	CXA1782CQ	SERVO IC	IC 151
	CXD2529Q	EFM DEMODULATION IC	IC 301
⚠	ICP-N10-T	IC PROTECTER	IC 31 34
⚠	L78LR05F-MA	REGULATOR IC	IC 22
⚠	LA6517	POWER OP-AMP IC	IC 202
⚠	LA6520	POWER OP-AMP IC	IC 201
	MTZJ18B/C-T	ZENER DIODE	D 54
	MTZJ6.2B/C-T	ZENER DIODE	D 218
	NJM4558D-D	OP-AMP IC	IC 405
⚠	PQ05RD11	REGULATOR IC	IC 21
⚠	S5688G-T	DIODE (TPA3)	D 11 12 13 14 52

CAPACITORS			
	CCCCH100D50-T	CERAMIC CAPACITOR	C 181
	CCCCH120J50-T	CERAMIC CAPACITOR	C 341 342
	CCCSL181J50-T	CERAMIC CAPACITOR	C 383
	CCCSL221J50-T	CERAMIC CAPACITOR	C 315
	CCCSL390J50-T	CERAMIC CAPACITOR	C 481 482
	CEAS101M10-T	ELECTROLYTIC CAP.	C 171 175 301 302 311 312 313 314 316 322
	CEAS101M35-T	ELECTROLYTIC CAP.	C 52
	CEAS102M16-F	ELECTROLYTIC CAP.	C 26
	CEAS220M25-T	ELECTROLYTIC CAP.	C 433 434
	CEAS330M16-T	ELECTROLYTIC CAP.	C 27 131 132 133 431 432
	CEAS332M16-F	ELECTROLYTIC CAP.	C 25
	CEAS4R7M50-T	ELECTROLYTIC CAP.	C 169 170
	CEASR10M50-T	ELECTROLYTIC CAP.	C 21
	CEASR47M50-T	ELECTROLYTIC CAP.	C 309
	CGCYX103K25-T	CERAMIC CAPACITOR	C 156 161 164 168 218
	CGCYX104K25-T	CERAMIC CAPACITOR	C 321
	CGCYX333K25-T	CERAMIC CAPACITOR	C 160
	CGCYX472K25-T	CERAMIC CAPACITOR	C 167
	CGCYX473K25-T	CERAMIC CAPACITOR	C 152 307
	CGCYX823K25-T	CERAMIC CAPACITOR	C 157
	CKCYB102K50-T	CERAMIC CAPACITOR	C 163
	CKCYB152K50-T	CERAMIC CAPACITOR	C 176 306 441 442
	CKCYB222K50-T	CERAMIC CAPACITOR	C 305
	CKCYB332K50-T	CERAMIC CAPACITOR	C 162
	CKCYB682K50-T	CERAMIC CAPACITOR	C 151 ⚠ ⚠ ⚠ ⚠
	CKCYF103Z50-T	CERAMIC CAPACITOR	C ⚠11 13 15 16 17 20 159 173 205 210 215 219 304 310 325 470 901
	CQMA104J50-T	MYLOR FILM CAPACITOR	C 153 154 155 158
RESISTORS			
	RD1/4PU102J-T	CARBON FILM RESISTOR	R 394 472 473
	RD1/4PU103J-T	CARBON FILM RESISTOR	R 10 11 12 51 186 307 353 354 355
	RD1/4PU104J-T	CARBON FILM RESISTOR	R 162 172 221 222 223 224 309 487 488 489 490
	RD1/4PU105J-T	CARBON FILM RESISTOR	R 315 342
	RD1/4PU112J-T	CARBON FILM RESISTOR	R 174
	RD1/4PU113J-T	CARBON FILM RESISTOR	R 187 188 211 213 231 233 241 243
	RD1/4PU121J-T	CARBON FILM RESISTOR	R 167
	RD1/4PU123J-T	CARBON FILM RESISTOR	R 216 302
	RD1/4PU124J-T	CARBON FILM RESISTOR	R 156
	RD1/4PU152J-T	CARBON FILM RESISTOR	R 52 53 54 323
	RD1/4PU163J-T	CARBON FILM RESISTOR	R 182 189
	RD1/4PU164J-T	CARBON FILM RESISTOR	R 173
	RD1/4PU183J-T	CARBON FILM RESISTOR	R 181
	RD1/4PU204J-T	CARBON FILM RESISTOR	R 160
	RD1/4PU222J-T	CARBON FILM RESISTOR	R 183 306
	RD1/4PU223J-T	CARBON FILM RESISTOR	R 212 214 232 234 242 244 301 303 395 396 443 444 481 482 485 486
	RD1/4PU244J-T	CARBON FILM RESISTOR	R 161 393
	RD1/4PU271J-T	CARBON FILM RESISTOR	R 341
	RD1/4PU272J-T	CARBON FILM RESISTOR	R 151

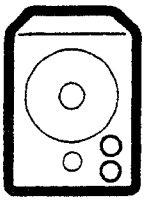
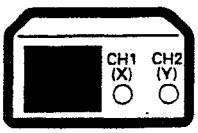
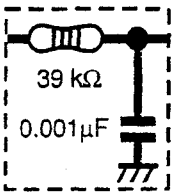
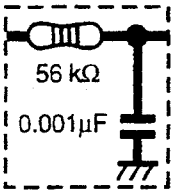
	RD1/4PU274J-T	CARBON FILM RESISTOR	R 157
	RD1/4PU303J-T	CARBON FILM RESISTOR	R 159
	RD1/4PU332J-T	CARBON FILM RESISTOR	R 305 494 499
	RD1/4PU333J-T	CARBON FILM RESISTOR	R 168 169 170 171 218
	RD1/4PU334J-T	CARBON FILM RESISTOR	R 304
	RD1/4PU470J-T	CARBON FILM RESISTOR	R 163 164 191 215 210 205 219 470 471
	RD1/4PU471J-T	CARBON FILM RESISTOR	R 448 461 462 462 497 498
	RD1/4PU473J-T	CARBON FILM RESISTOR	R 152 437 438
	RD1/4PU514J-T	CARBON FILM RESISTOR	R 154 166
	RD1/4PU563J-T	CARBON FILM RESISTOR	R 155
	RD1/4PU683J-T	CARBON FILM RESISTOR	R 158
	RD1/4PU823J-T	CARBON FILM RESISTOR	R 153 439 440 441 442
	XCP1001-A-T	PRE-SET RESISTOR	VR 153 155
	XCP1002-A-T	PRE-SET RESISTOR	VR 151 152 154
	XCP1003-A-T	PRE-SET RESISTOR	VR 156
OTHERS			
	173981-4	CONNECTOR (4P)	CN 202
	173981-5	CONNECTOR (5P)	CN 205
	52030-1610	CONNECTOR	CN 131
	52045-2345	CONNECTOR (23P)	CN 351
	52147-0310	CONNECTOR (3P)	CN 401
⚠	AKP7005-A	YKE31-0119 AC INLET	CN 1
	PKB1023-A	YKC21-3226 PIN JACK	JA 401
	PKN1005-A	MINI JACK	J 393
	PSS1008-A-T	CRYSTAL RESONATOR	X 341
	RKP-533--	B6P-SHF-1AA-K CONN6P	CN 201
	TOTX178	OPTICAL JACK	JA 321
	XTS1002-A	POWER TRANSFORMER	TR 1

6. ADJUSTMENT

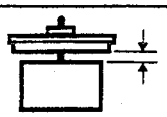
6.1 ELECTRIC ADJUSTMENTS

6.1.1 PREPARATIONS

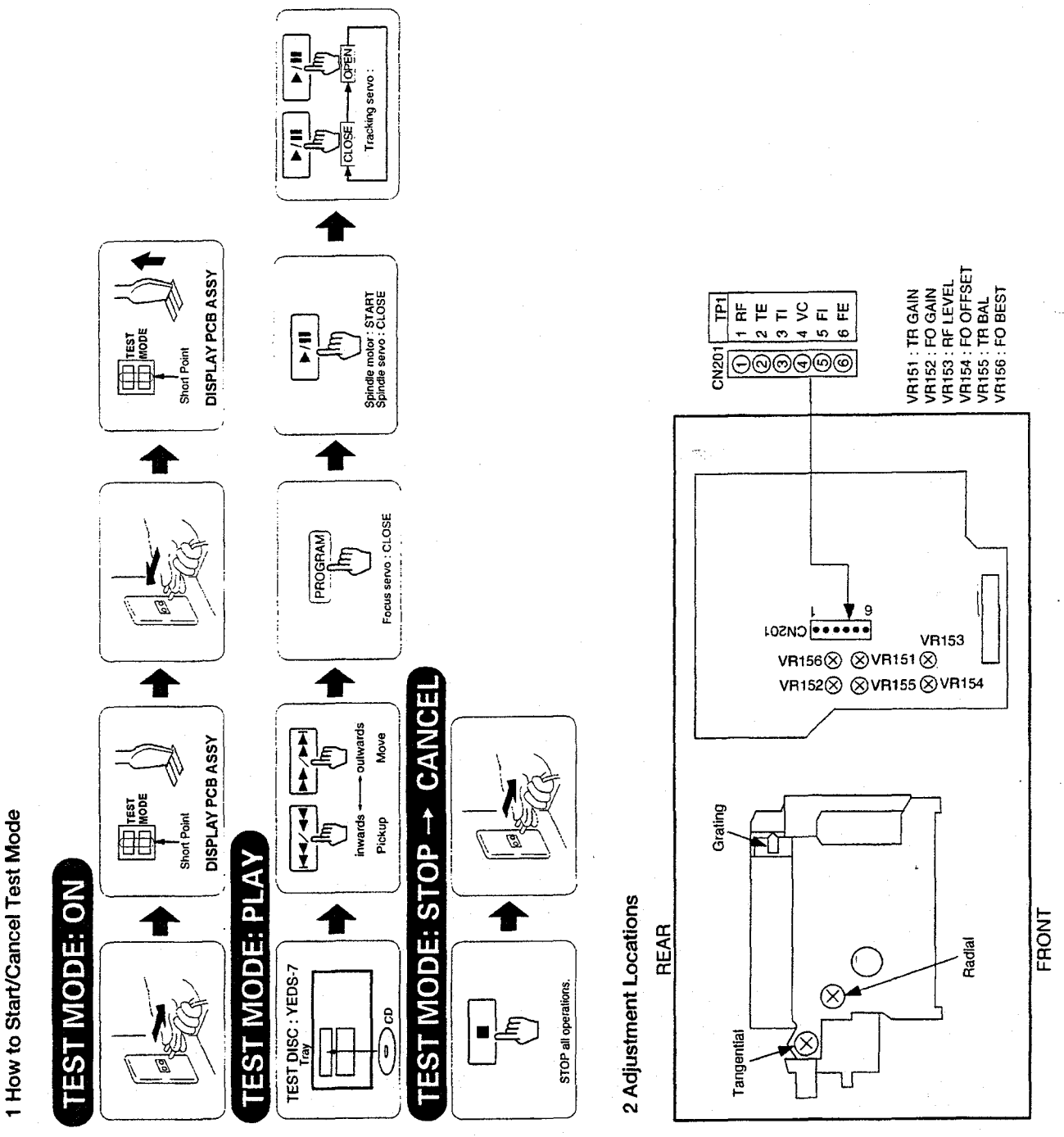
1.1 Jigs and Measuring Instruments

8-cm DISC (With at least about 20 minutes recording)	CD TEST DISC (YEDS-7)	⊖ Precise screwdriver	⊖ screwdriver (small)	⊕ screwdriver (medium)
Ball point hexagon wrench (size: 1.5mm) GGK1002	⊕ screwdriver (large)	 Low-frequency oscillator	 Dual-trace oscilloscope (10 : 1 probe)	 Low pass filter① (39 kΩ + 0.001μF)
				 Low pass filter② (56 kΩ + 0.001μF)

1.2 Necessary Adjustment Points

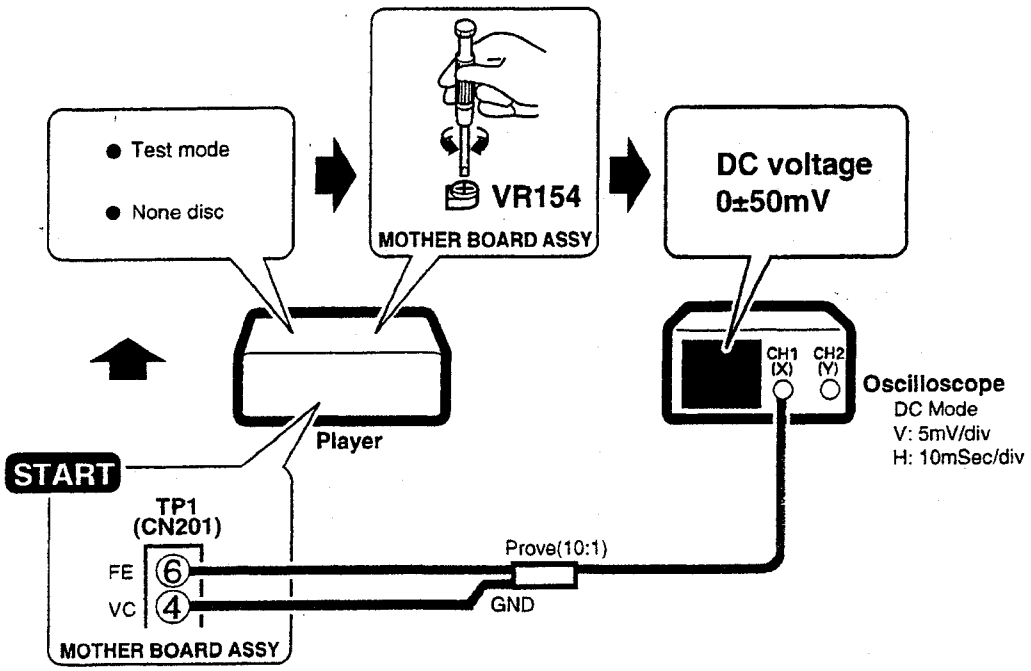
When	Adjustment points
Exchange PICKUP	1.2.3.4.5.6.7. 8.9.10.11.12. → Page 21~26
Exchange MOTHER BOARD ASSY	1.3.5.6.7.8. 9.10.11.12. → Page 21~26
Exchange SERVO MECH ASSY	1.2.3.4.5.6.7. 8.9.10.11.12. → Page 21~26
Exchange SPINDLE MOTOR	 ADJ → Page 8

6.1.2 ADJUSTMENT

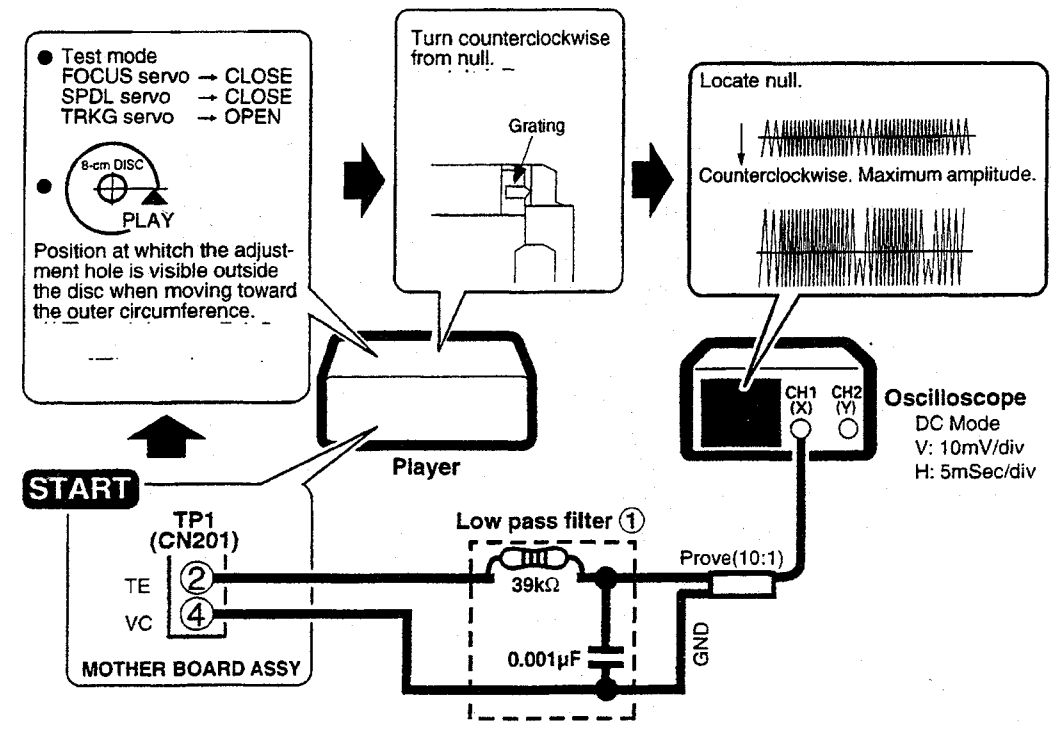


6.2 Check and Adjustment

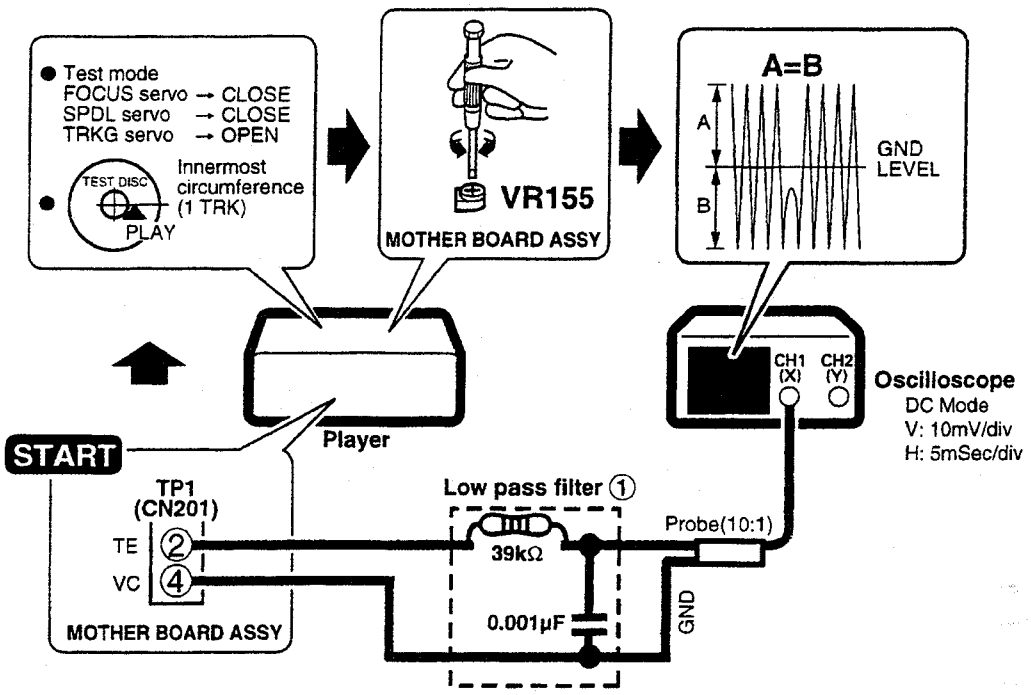
1. Focus Offset Adjustment



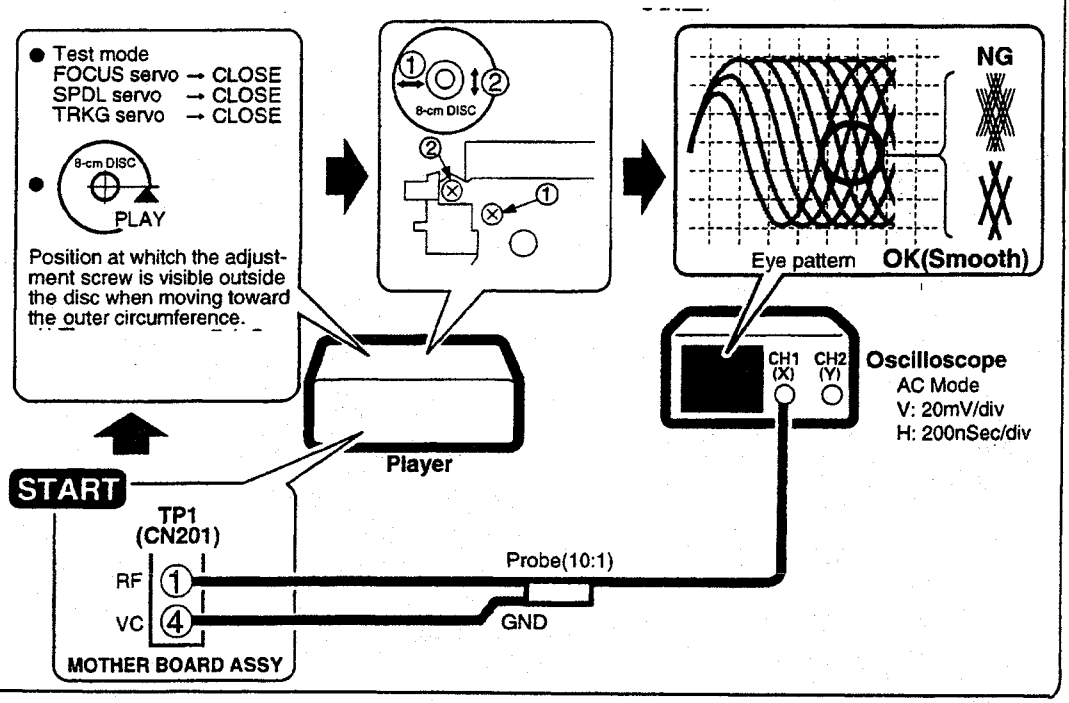
2. Grating Adjustment



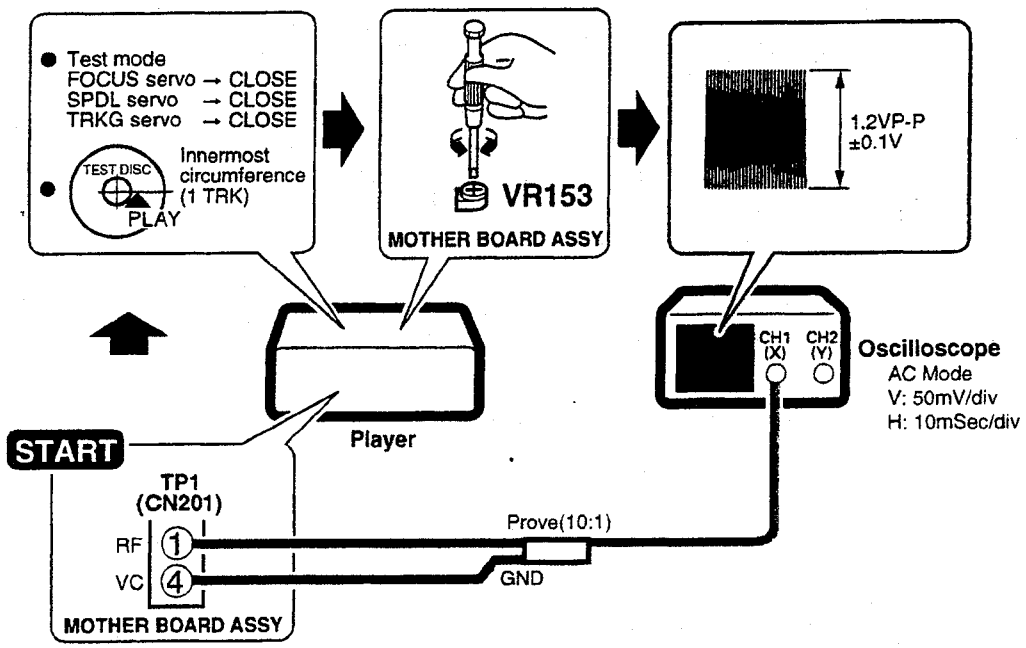
3. Tracking Error Barance Adjustment



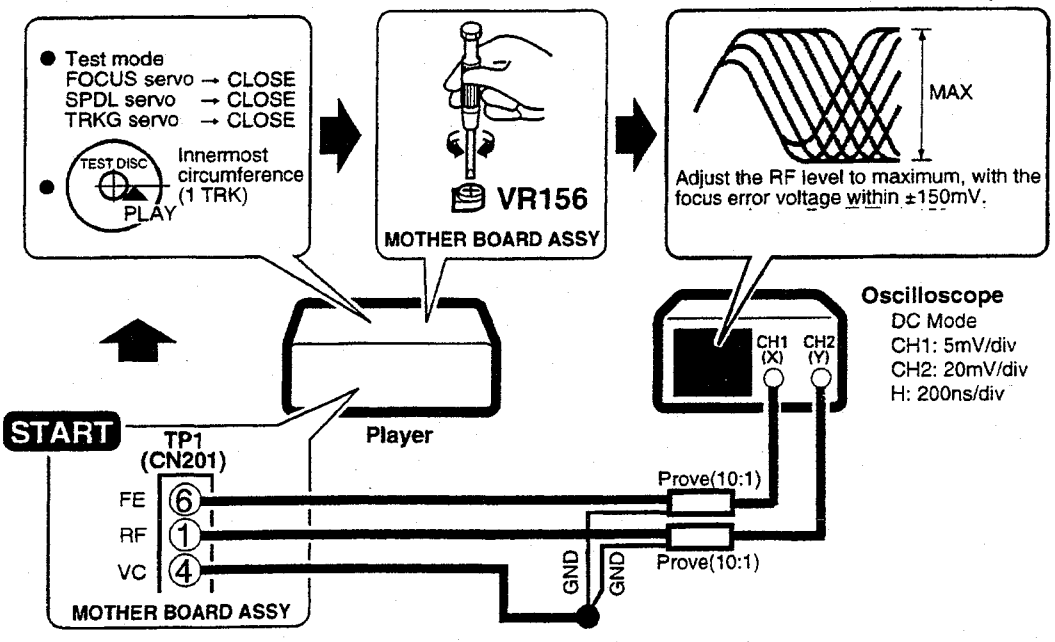
4. PICKUP ①RADIAL / ②TANGENTIAL DIRECTION TILT ADJUSTMENT



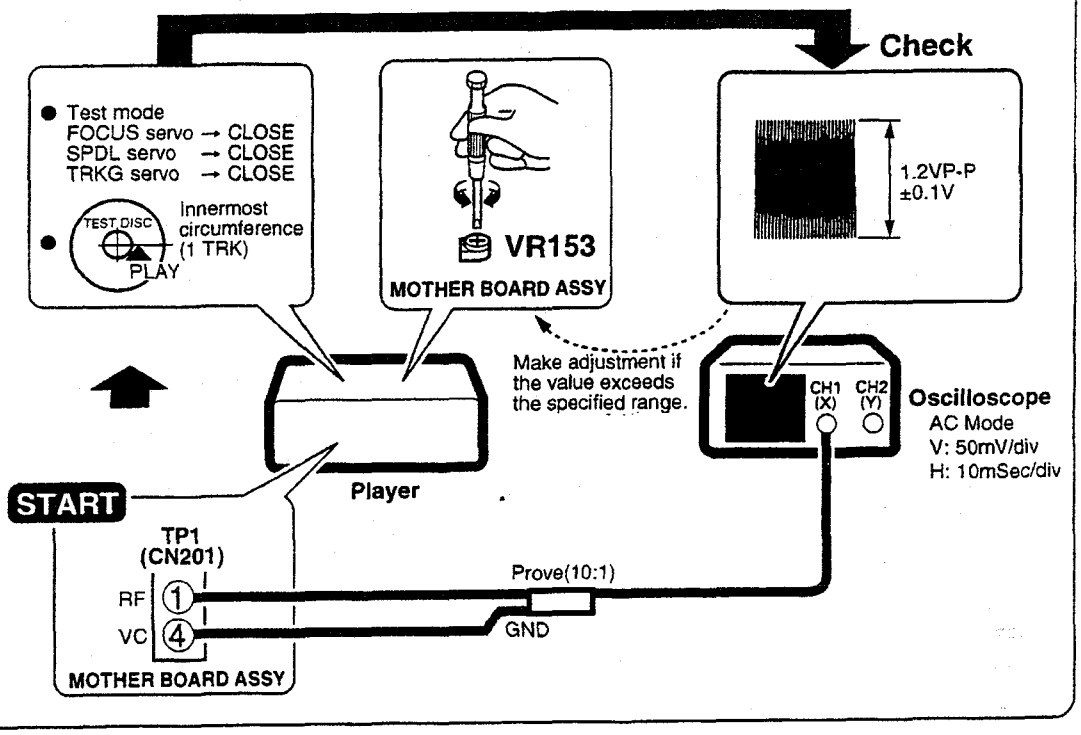
5. RF LEVEL ADJUSTMENT I



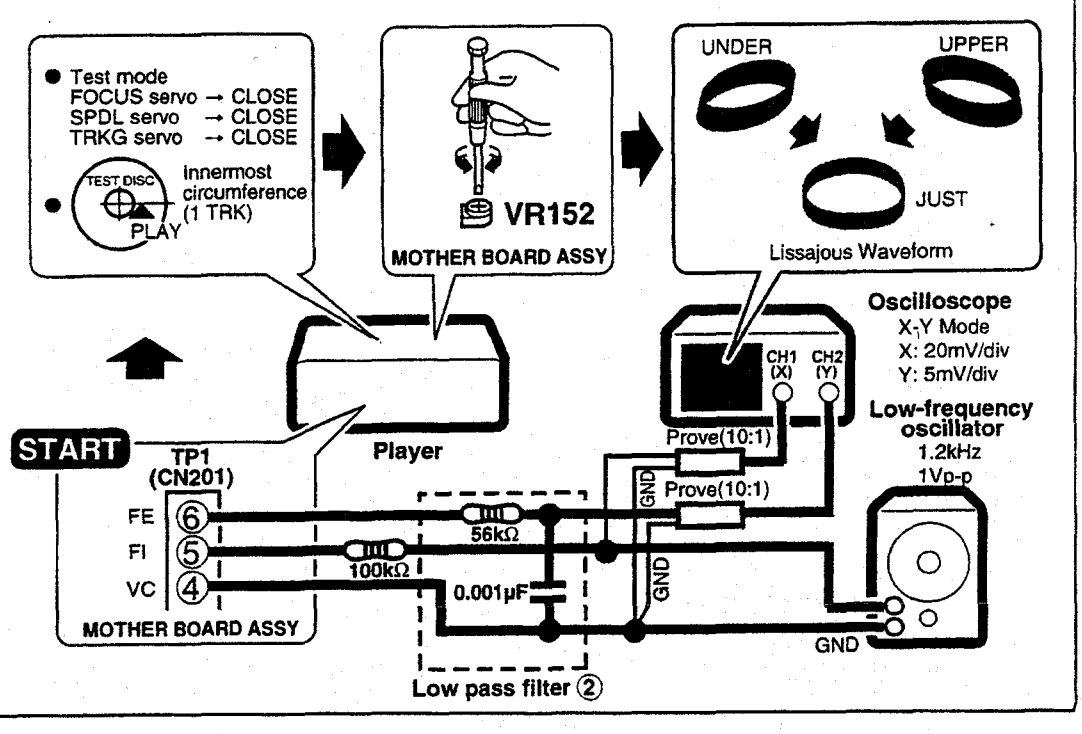
6. Focus Best Adjustment I



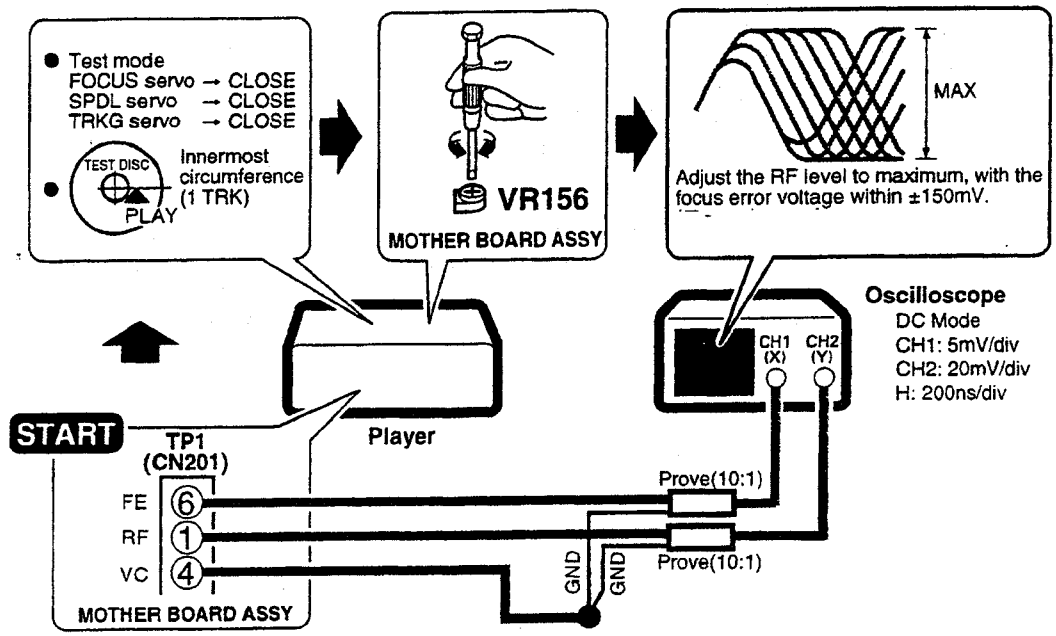
7. RF LEVEL ADJUSTMENT II



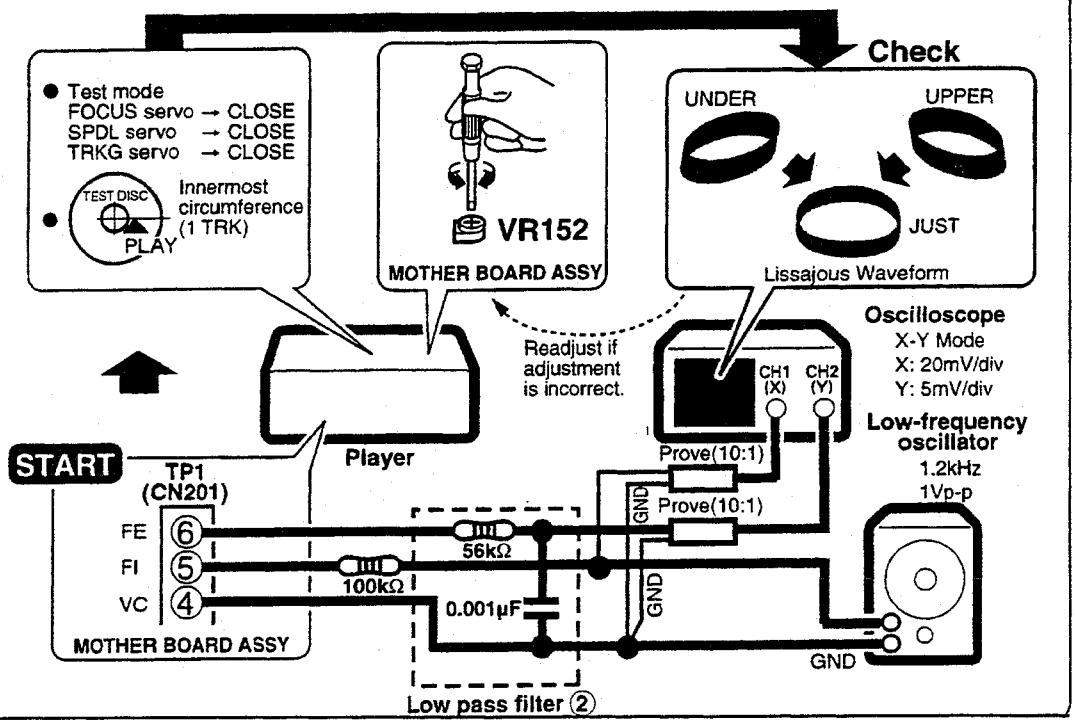
8. Focus Servo Loop Gain Adjustment I



9. Focus Best Adjustment II

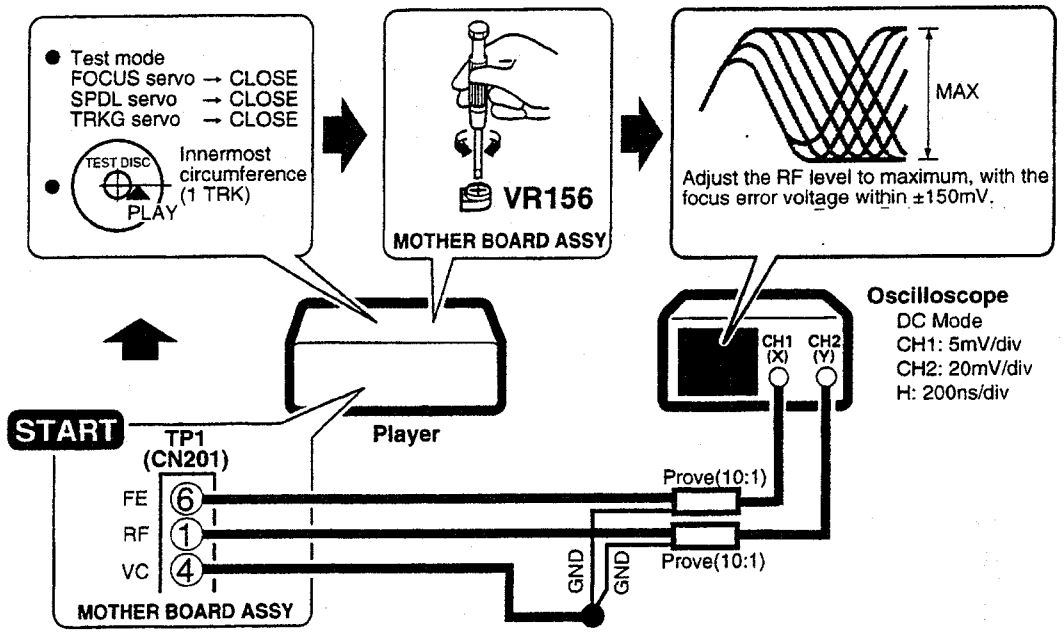


10. Focus Servo Loop Gain Adjustment II

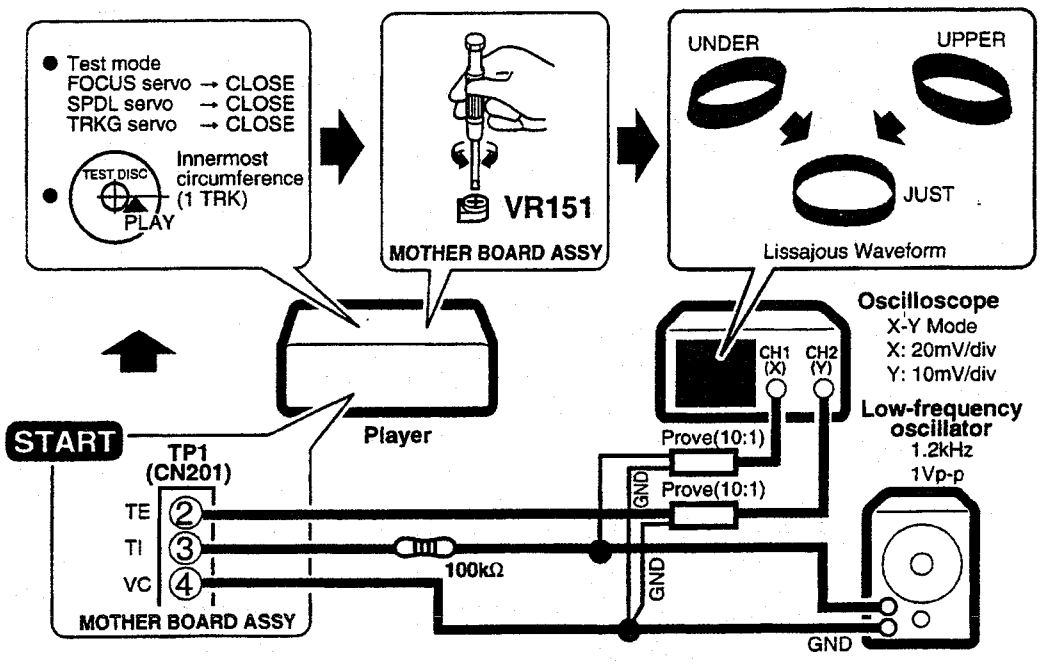


11. Focus Best Adjustment Ⅲ

Adjust this point only if adjustment was made in item 10.

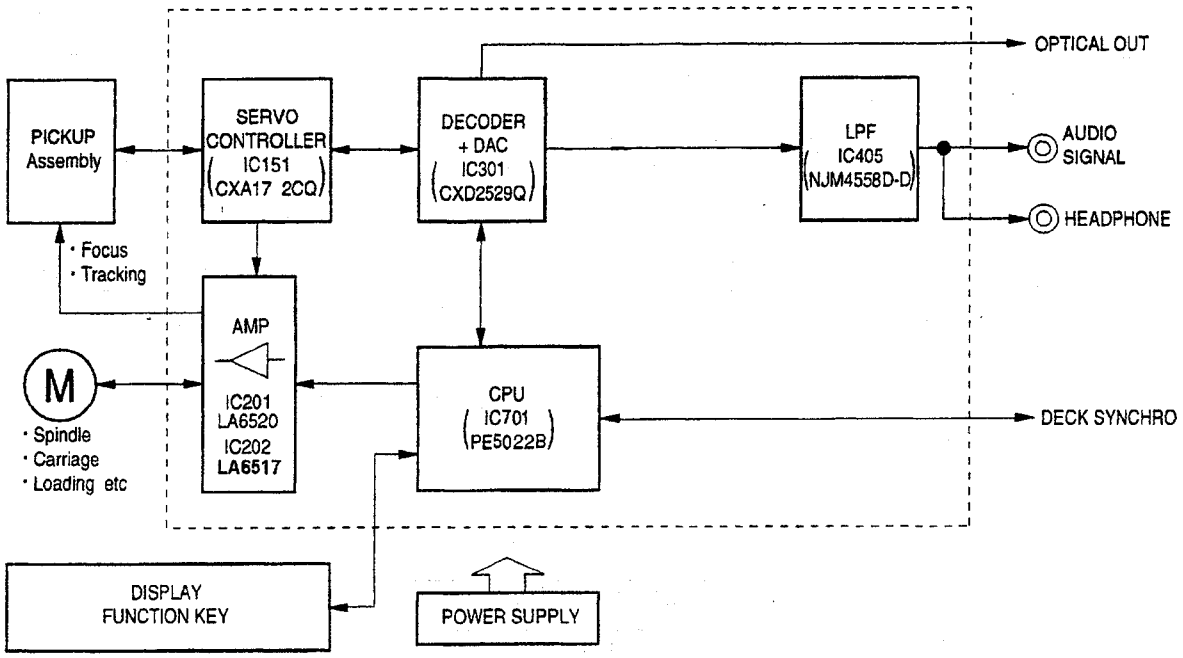


12. Tracking Servo Loop Gain Adjustment

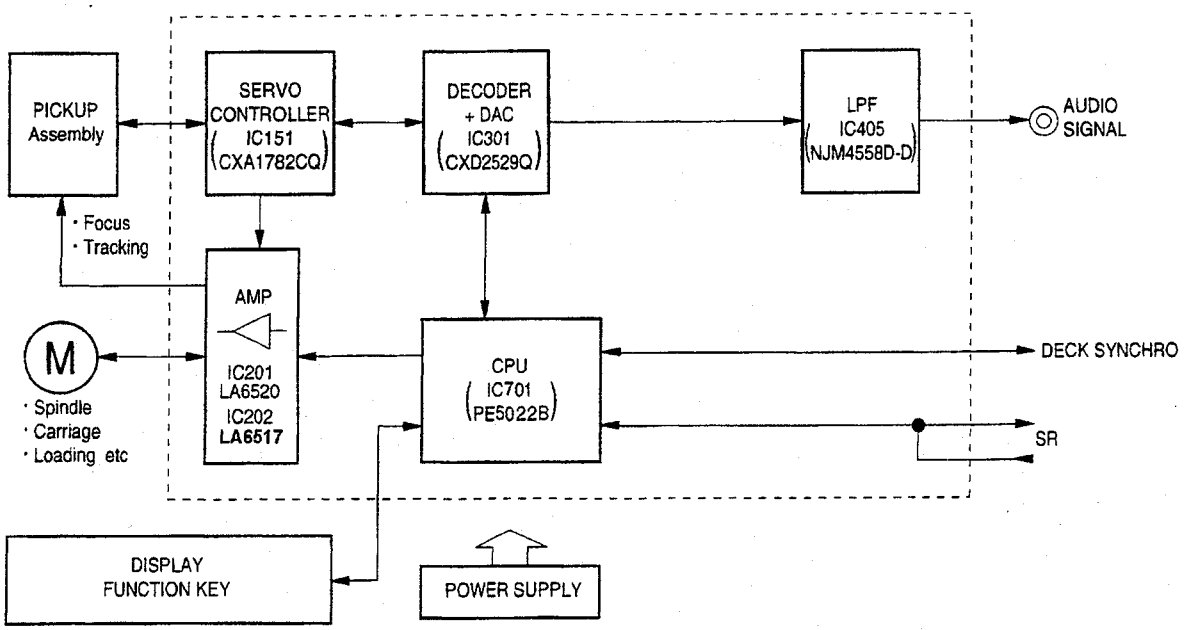


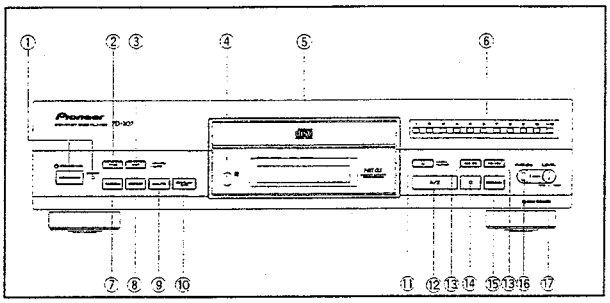
7. GENERAL INFORMATION

PD-207



PD-107





FRONT PANEL

(The diagram shows the PD-207)

① **STANDBY/ON switch and STANDBY indicator**

② **TIME button**

③ **COMPU/AUTO EDIT button**

④ **Remote sensor (PD-207 only)**
Receives the signal from the remote control unit.

⑤ **Disc tray**

⑥ **Digit buttons (PD-207 only)**
(1 - 10, >10)

⑦ **RANDOM button**

⑧ **REPEAT button**

⑨ **HI-LITE scan button**

⑩ **DISPLAY OFF button**

⑪ **OPEN/CLOSE button (⏏)**

⑫ **Play/Pause button (▶/II)**

⑬ **Track/Manual search buttons**
(⏮ ◀◀ /▶▶ ⏭)

⑭ **Stop button (■)**

⑮ **PROGRAM button**

⑯ **Headphones jack (PHONES) (PD-207 only)**

⑰ **Headphones volume control (LEVEL)**
(PD-207 only)

1. General

Type	Compact disc digital audio system
Power requirements	AC 220 - 240 V, 50/60 Hz
Power consumption	12 W
Operating temperature	+5°C - +35°C
Weight	3.1 kg
External dimensions	420(W) X 101(H) X 267(D) mm

2. Audio section

PD-207, PD-107

Frequency response	2 Hz - 20 kHz
S/N ratio	98 dB (EIAJ)
Dynamicrange	96 dB or more (EIAJ)
Harmonic distortion	0.003% or less (EIAJ)
Output voltage	2.0 V (EIAJ)
Wow and flutter	Limit of measurement (±0.001% W.PEAK) or less (EIAJ)
Channels	2-channel (stereo)

3. Output terminal

Audio line output jacks
Control input/output jacks (PD-107 only)
CD-DECK SYNCHRO jack
Headphones jack (with volume control) (PD-207 only)
Optical digital output jack

4. Accessories

① Output cable	1
② Control cable (PD-107 only)	1
③ AAA dry cell batteries (PD-207 only)	2
④ Remote control unit (PD-207 only)	1
⑤ Power Cord	1
÷ Operating instructions	1
÷ Warranty Card	1

NOTE:

Specifications and design subject to possible modification without notice, due to improvements.